

# BACKFILE DOCUMENT INDEX SHEET

A DOCPHOENIX

## APPL PARTS

<b>IMIS</b>	
Internal Misc. Paper	
<b>LET.</b>	

Misc. Incoming Letter

**371P**

PCT Papers in a 371 Application

**A...**

Amendment Including Elections

**ABST**

Abstract

**ADS**

Application Data Sheet

**AF/D**

Affidavit or Exhibit Received

**APPENDIX**

Appendix

**ARTIFACT**

Artifact

**BIB**

Bib Data Sheet

**CLM**

Claim

**COMPUTER**

Computer Program Listing

**CRFL**

All CRF Papers for Backfile

**DIST**

Terminal Disclaimer Filed

**DRW**

Drawings

**FOR**

Foreign Reference

**FRPR**

Foreign Priority Papers

**IDS**

IDS Including 1449

**NPL**

Non-Patent Literature

**OATH**

Oath or Declaration

**PET.**

Petition

**RETRN**

Mail Returned by USPS

**SEQLIST**

Sequence Listing

**SPEC**

Specification

**SPEC NO**

Specification Not in English

**TRNA**

Transmittal New Application

**CTNF**

Count Non-Final

**CTRS**

Count Restriction

**EXIN**

Examiner Interview

**M903**

DO/EO Acceptance

**M905**

DO/EO Missing Requirement

**NFDR**

Formal Drawing Required

**NOA**

Notice of Allowance

**PETDEC**

Petition Decision

## OUTGOING

**CTMS**

Misc. Office Action

**1449**

Signed 1449

**892**

892

**ABN**

Abandonment

**APDEC**

Board of Appeals Decision

**APEA**

Examiner Answer

**CTAV**

Count Advisory Action

**CTEQ**

Count Ex parte Quayle

**CTFR**

Count Final Rejection

## INCOMING

**AP.B**

Appeal Brief

**C.AD**

Change of Address

**N/AP**

Notice of Appeal

**PA..**

Change in Power of Attorney

**REM**

Applicant Remarks in Amendment

**XT/**

Extension of Time filed separate

## File Wrapper

**FWCLM**

File Wrapper Claim

**IIFW**

File Wrapper Issue Information

**SRFW**

File Wrapper Search Info

### Internal

19/12/02 SRNT 25

Examiner Search Notes

**CLMPTO**

PTO Prepared Complete Claim Set

6/26/03

**ECBOX**

Evidence Copy Box Identification

**WCLM**

Claim Worksheet

**WFEE**

Fee Worksheet

09894798

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:ssspta1626kas

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 Apr 08 "Ask CAS" for self-help around the clock  
NEWS 3 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area  
NEWS 4 Apr 09 ZDB will be removed from STN  
NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB  
NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS  
NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER  
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available  
NEWS 9 Jun 03 New e-mail delivery for search results now available  
NEWS 10 Jun 10 MEDLINE Reload  
NEWS 11 Jun 10 PCTFULL has been reloaded  
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment  
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;  
saved answer sets no longer valid  
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY  
NEWS 15 Jul 30 NETFIRST to be removed from STN  
NEWS 16 Aug 08 CANCERLIT reload  
NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN  
NEWS 18 Aug 08 NTIS has been reloaded and enhanced  
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)  
now available on STN  
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded  
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded  
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced  
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced  
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file  
NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS  
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA  
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985  
NEWS 28 Oct 21 EVENTLINE has been reloaded  
NEWS 29 Oct 24 BEILSTEIN adds new search fields  
NEWS 30 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN  
NEWS 31 Oct 25 MEDLINE SDI run of October 8, 2002  
NEWS 32 Nov 18 DKILIT has been renamed APOLLIT  
NEWS 33 Nov 25 More calculated properties added to REGISTRY  
NEWS 34 Dec 02 TIBKAT will be removed from STN  
NEWS 35 Dec 04 CSA files on STN  
NEWS 36 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date  
NEWS 37 Dec 17 TOXCENTER enhanced with additional content  
NEWS 38 Dec 17 Adis Clinical Trials Insight now available on STN  
  
NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01,  
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002

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NEWS HOURS	STN Operating Hours Plus Help Desk Availability
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FILE 'HOME' ENTERED AT 14:42:04 ON 19 DEC 2002

=> FILE REG			
COST IN U.S. DOLLARS	SINCE FILE	TOTAL	
FULL ESTIMATED COST	ENTRY	SESSION	
	0.21	0.21	

FILE 'REGISTRY' ENTERED AT 14:42:13 ON 19 DEC 2002  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 18 DEC 2002 HIGHEST RN 477178-10-2  
DICTIONARY FILE UPDATES: 18 DEC 2002 HIGHEST RN 477178-10-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=>  
Uploading C:\Program Files\Stnexp\Queries\10265329111.str

L1 STRUCTURE uploaded

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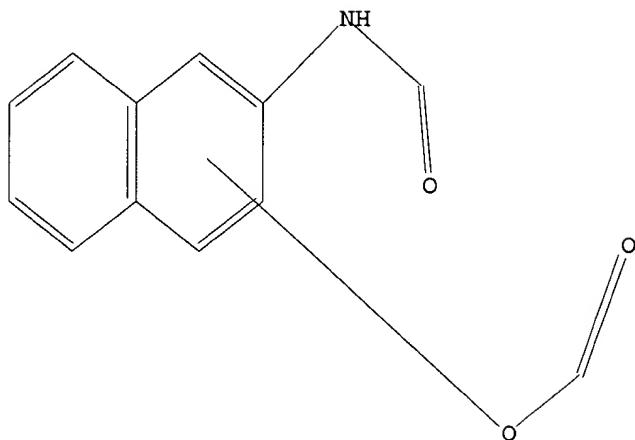
=> que L1

L2 QUE L1

=> D

L2 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.  
L2 QUE ABB=ON PLU=ON L1

=> S L1 FULL

FULL SEARCH INITIATED 14:47:41 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 26645 TO ITERATE

100.0% PROCESSED 26645 ITERATIONS  
SEARCH TIME: 00.00.06

46 ANSWERS

L3 46 SEA SSS FUL L1

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END) :end

=>  
Uploading C:\Program Files\Stnexp\Queries\10265329111.str

L4 STRUCTURE UPLOADED

=> que L4

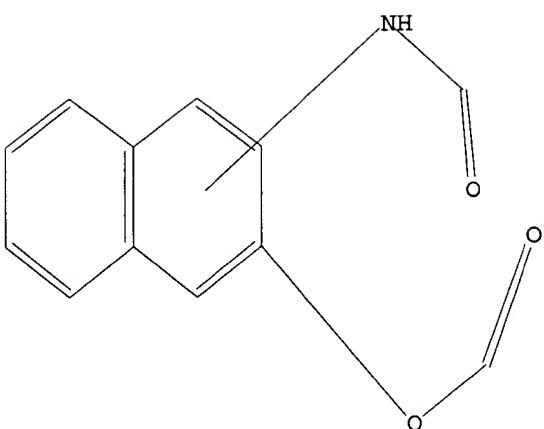
L5 QUE L4

=> D

L5 HAS NO ANSWERS

L4 STR

09894798



Structure attributes must be viewed using STN Express query preparation.  
L5            OUE    ABB=ON    PLU=ON    L4

=> S L4 FULL  
FULL SEARCH INITIATED 14:50:13 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 9176 TO ITERATE

100.0% PROCESSED 9176 ITERATIONS 31 ANSWERS  
SEARCH TIME: 00.00.01

L6 31 SEA SSS FUL L4

FILE 'CAPLUS' ENTERED AT 14:50:26 ON 19 DEC 2002  
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FILE COVERS 1907 - 19 Dec 2002 VOL 137 ISS 25  
FILE LAST UPDATED: 18 Dec 2002 (20021218/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please

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check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> S L3  
L7            29 L3

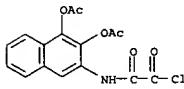
=> S L6  
L8            20 L6

=> S L7 AND L8  
L9            7 L7 AND L8

=> D IBIB ABS HITSTR TOT

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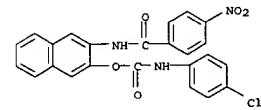
L9 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1995:51752 CAPLUS  
 DOCUMENT NUMBER: 122:55762  
 TITLE: Synthesis and antibacterial activity of new ureido and acylpenicillines  
 and dicarboxylic acid diamido derivatives of acylpenicillines with and without catechol substituents  
 AUTHOR(S): Heinisch, L.; Meilmann, U.; Tresselt, D.; Willitzer, H.  
 CORPORATE SOURCE: Hans-Knoell-Institute Naturstoff-Forschung, Jena, Germany  
 SOURCE: Arzneimittel-Forschung (1994), 44(3), 349-54  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB Ureido, oxamoyl, fumaramoyl and terephthalamoyl derivs. of ampicillin or amoxicillin were synthesized by reaction of (acyl)penicillin with (dihydroxy)arylamines or (diacycloxy)arylamines. Corresponding compds. derived from 3,4-diacetoxyaniline showed significant increase of activity against pseudomonas and salmonella in contrast to derive. without catechol substituents. No increase of activity was obstd. by corresponding derive. of bi- and tricyclic amines. Derive. with oxamoyl, fumaramoyl or terephthalamoyl groups were found to be more active than the corresponding ureido derivs. Studies with mutants possessing higher membrane permeability have shown that the high activities of catechol contg. derivs. are connected with the improved penetration through the outer membrane. Some new penicillin derivs. are more stable against  $\beta$ -lactamases compared with azlocillin.  
 IT 159788-34-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. of (acyl)penicillin derivs. bactericides)  
 RN 159788-34-8 CAPLUS  
 CN Acetyl chloride, [(3,4-bis(acetoxy)-2-naphthalenyl]amino]oxo- (9CI)  
 (CA INDEX NAME)



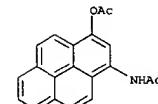
L9 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1984:605798 CAPLUS  
 DOCUMENT NUMBER: 101:205798  
 TITLE: Metabolism of 1-nitro[U-4,5,9,10-14C]pyrene in the F344 rat  
 AUTHOR(S): El-Bayoumy, Karam; Hecht, Stephen S.  
 CORPORATE SOURCE: Naylor Dana Inst. Dis. Prev., Am. Health Found., Valhalla, NY, 10595, USA  
 SOURCE: Cancer Research (1984), 44(10), 4317-22  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

AB 14C-labeled 1-nitropyrene (I) [5522-43-0] was synthesized and administered to male F344 rats by intragastric gavage at a dose of 100 mg/kg. During the 1st 48 h, 41% of the dose was eliminated in the feces, and 16% was eliminated in the urine. The corresponding figures after 120 h were 51 and 19%. In rats with bile cannulae, 37% of the dose was excreted in the urine. Fecal metabolites included 1-aminoypyrene [1600-67-3] (isolated amt., 11.7% of the dose), 1-amino-6-hydroxypyrene [1732-30-5] and 1-amino-8-hydroxypyrene [1732-31-6] (4.6%), and unchanged I (6.6%). 1-Aminoypyrene and the 1-amino-6-hydroxypyrenes were identified as their acetyl derivs. by comparison of their chromatog. retention times, mass spectra, and UV spectra to those of synthetic stds. Biliary metabolites included 1-aminoypyrene, 1-amino-6-hydroxypyrene, 1-amino-8-hydroxypyrene, 1-nitro-6(8)-hydroxypyrene [92997-50-7], and 1-nitro-3-hydroxypyrene [86674-49-9] as well as their glucuronide and sulfate conjugates. The isolated amts. of these metabolites accounted for approx. 5% of the dose. 1-Amino-6-hydroxypyrene and 1-amino-8-hydroxypyrene and their glucuronide and sulfate conjugates were also tentatively identified in the urine and accounted for approx. 3% of the dose. Significant quantities of unidentified water-sol. metabolites were present in the urine and bile. Thus, metabolic redn. of the highly mutagenic 1-nitropyrenes occurs in vivo in the rat and this is a possible activation pathway in I carcinogenesis.  
 IT 93090-84-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 RN 93090-84-7 CAPLUS  
 CN Acetamide, N-[3-(acetoxy)-1-pyrenyl]- (9CI) (CA INDEX NAME)

L9 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1989:145091 CAPLUS  
 DOCUMENT NUMBER: 110:145091  
 TITLE: Diazo thermal recording materials  
 INVENTOR(S): Watanabe, Jiro  
 PATENT ASSIGNEE(S): Toppan Printing Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 JP 63242679 A2 19881007 JP 1987-77978 19870331  
 OTHER SOURCE(S): MARPAT 110:145091  
 GI For diagram(s), see printed CA Issue.  
 AB Thermal recording materials have recording layer contg. diazo compds., thermal developers, acids, polymer binders, and carbamic acid esters of the formula  $\text{ArCONHAr}_1$  [ $\text{Ar}, \text{Ar}_1 = (\text{substituted}) \text{hydrocarbyl}$ ] that produce an active diazo coupler upon heating. These materials provide simple means of printing and give durable fixed copies with materials optionally selected for many purposes. Thus, a coating compn. contg. 1 part of a dispersion contg. 10% of the diazonium salt I, 5 parts of a dispersion contg. 5% II, and 20% di(N-decyldiimidine) tartarate, and other agents was coated on a paper sheet to obtain the printing material, which gave blue thermal image with d. 1.32 and fog d. 0.07. The fog d. of the material was 0.09 when printed after storage at 40.degree. and 90% relative humidity for 2 days.  
 IT 119686-59-8  
 RL: USES (Uses)  
 (diazo coupler precursor, thermal printing materials contg., for storage stability and low fog)  
 RN 119686-59-8 CAPLUS  
 CN Carbamic acid, (4-chlorophenyl)-, 3-[(4-nitrobenzoyl)amino]-2-naphthalenyl ester (9CI) (CA INDEX NAME)

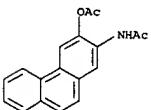


L9 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2002 ACS (Continued)

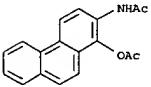


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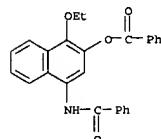
L9 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1974-520304 CAPLUS  
 DOCUMENT NUMBER: 81:120304  
 TITLE: Synthesis and reactions of some carcinogenic  
 (2-phenanthryl)hydroxylamine derivatives  
 AUTHOR(S): Calder, I. C.; Williams, P. J.  
 CORPORATE SOURCE: Dep. Chem., Univ. Melbourne, Parkville, Australia  
 SOURCE: Australian Journal of Chemistry (1974), 27(8), 1791-5  
 CODEN: AUJCHAS; ISSN: 0004-9425  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The synthesis of 2-nitrophenanthrene from 9,10-dihydrophenanthrene is reported. Some N-(2-phenanthryl)hydroxylamine derivs. have been prep'd. and the structure of the rearrangement products detd.  
 IT 53535-42-4P 53856-19-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prep'n. of)  
 RN 53535-41-4 CAPLUS  
 CN Acetamide, N-[3-(acetoxy)-2-phenanthrenyl]- (9CI) (CA INDEX NAME)



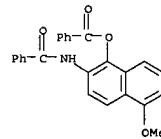
RN 53856-19-2 CAPLUS  
 CN Acetamide, N-[1-(acetoxy)-2-phenanthrenyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1972-551291 CAPLUS  
 DOCUMENT NUMBER: 77:151291  
 TITLE: Controlled potential electrochemical reduction of substituted nitronaphthalenes. II. Substituent effects  
 AUTHOR(S): Jubault, Michel; Peltier, Daniel  
 CORPORATE SOURCE: Lab. Chim. Anal., Univ. Rennes, Rennes, Fr.  
 SOURCE: Bull. Soc. Chim. Fr. (1972), (4), 1551-61  
 CODEN: BSCFAS  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 GI: For diagram(s), see printed CA Issue.  
 AB: The MeO group in naphthyldihydroxylamines I (R = OMe) promotes their stability, while I' (R = OH, NH2) are less stable. The stability of the isomers of I (R = Cl) and their rearrangement reactions are discussed. Data are given for the electrochem. redn. of nitronaphthalenes II (R = OMe, OH, NH2, NO2, Cl, CN, COOH) to the corresponding I'.  
 IT 38397-16-9P 38410-26-3P 38410-39-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prep'n. of)  
 RN 38397-16-9 CAPLUS  
 CN Benzamide, N-[3-(benzoyloxy)-4-ethoxy-1-naphthalenyl]- (9CI) (CA INDEX NAME)

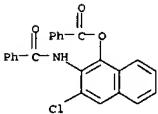


RN 38410-26-3 CAPLUS  
 CN Benzamide, N-[1-(benzoyloxy)-5-methoxy-2-naphthalenyl]- (9CI) (CA INDEX NAME)

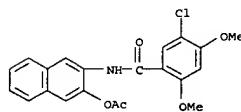


RN 38410-39-8 CAPLUS

L9 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 CN Benzamide, N-[1-(benzoyloxy)-3-chloro-2-naphthalenyl]- (9CI) (CA INDEX NAME)

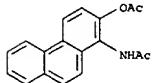


L9 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1967-470645 CAPLUS  
 DOCUMENT NUMBER: 67:70645  
 TITLE: Histochimical detection of nonspecific esterases. I. Conditions for application of various naphthol-AS substrates and diazonium salts  
 AUTHOR(S): Vadasz, Gy.; Posalaky, Zoltan; Bacey, Erno  
 CORPORATE SOURCE: Akad. Wiss., Budapest, Hung.  
 SOURCE: Acta Histochem. (1967), 27(2), 331-8  
 CODEN: AHISA9  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB: The conditions influencing the applicability of different naphthol-AS substrates and different diazonium salts for the histochem. demonstration of nonspecific esterases were examd. On application of 9 substrates and 3 diazonium salts of 3 usual compds. of the incubation soln. a total of 81 combinations was examd. The activity of the enzyme was influenced by all the conditions. The enzyme activity was mainly dependent on the substrate.  
 IT 17093-69-5  
 RL: BIOL (Biological study)  
 (in esterase detection)  
 RN 17093-69-5 CAPLUS  
 CN 2-Naphthaniide, 5'-chloro-3-hydroxy-2',4'-dimethoxy-, acetate (ester) (8CI) (CA INDEX NAME)



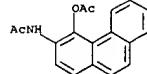
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L9 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1963468981 CAPLUS  
DOCUMENT NUMBER: 59-68981  
ORIGINAL REFERENCE NO.: 59:12728h, 12729a-C  
TITLE: Hydroxy derivatives of phenanthrene. III.  
1,2-Phenanthrenequinone 2-oxime and  
3,4-phenanthrenequinone 3-oxime  
AUTHOR(S): Bogdanov, S. V.; Shibryaeva, L. S.  
SOURCE: Zh. Obshch. Khim. (1963), 33(5), 1529-32  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
GI For diagram(s), see printed CA Issue.  
AB cf. CA 59, 11483e. 1,2-Phenanthrenequinone refluxed 2 hrs. with  
HONH<sub>2</sub>.HCl  
and pyridine in EtOH gave, after treatment with H<sub>2</sub>O and NaOH, an insol.  
unidentified black solid; acidification of the ext. gave 65% orange  
1,2-phenanthrenequinone 2-oxime (I), decompd. 167-8.5.degree.; K salt, red  
plates, sparingly sol. in EtOH or cold H<sub>2</sub>O; it failed to react with  
NaHSO<sub>3</sub>. Redn. of I with SnCl<sub>2</sub> in EtOH gave 2-amino-1-phenanthrol,  
decompd. 317-18.degree.. 3,4-Phenanthrenequinone similarly gave 70%  
3-oxime (II), orange, decompd. 164-5.degree.; K salt was sol. in EtOH.  
II  
was unaffected by NaHSO<sub>3</sub>, while SnCl<sub>2</sub> reduced it to  
3-amino-4-phenanthrol,  
isolated as HCl salt, difficulty sol. colorless plates, which with Ac<sub>2</sub>O  
in  
pyridine gave the diacetyl deriv., m. 198.5-9.5.degree.. I refluxed 26  
hrs. with HONH<sub>2</sub>.HCl in pyridine and 90% EtOH gave 67% 1,2-  
phenanthrofuran, m. 171.8-2.5.degree.. II similarly treated 60 hrs.  
failed to react.  
IT  
98364-44-4, Acetamide, N-(2-hydroxy-1-phenanthryl)-, acetate  
98364-45-5, Acetamide, N-(4-hydroxy-3-phenanthryl)-, acetate  
(prepn. of)  
RN 98364-44-4 CAPLUS  
CN Acetamide, N-(2-hydroxy-1-phenanthryl)-, acetate (7CI) (CA INDEX NAME)



RN 98364-45-5 CAPLUS  
CN Acetamide, N-(4-hydroxy-3-phenanthryl)-, acetate (7CI) (CA INDEX NAME)

L9 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2002 ACS (Continued)



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=> DD HIS

DD IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> D HIS

(FILE 'HOME' ENTERED AT 14:42:04 ON 19 DEC 2002)

FILE 'REGISTRY' ENTERED AT 14:42:13 ON 19 DEC 2002

L1           STRUCTURE UPLOADED  
L2           QUE L1  
L3           46 S L1 FULL  
L4           STRUCTURE UPLOADED  
L5           QUE L4  
L6           31 S L4 FULL

FILE 'CAPLUS' ENTERED AT 14:50:26 ON 19 DEC 2002

L7           29 S L3  
L8           20 S L6  
L9           7 S L7 AND L8

=> D L7

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L7 ANSWER 1 OF 29 CAPIUS COPYRIGHT 2002 ACS  
AN 2002:566558 CAPIUS  
DN 137:132040  
TI Diffusion-transfer color photographic material  
IN Fukagawa, Nobutaka; Ito, Takayuki  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 55 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1  
PATENT NO. KIND DATE APPLICATION NO. DATE  
----- ----- -----  
PI JP 200214752 A2 20020731 JP 2001-15105 20010123  
OS MARPAT 137:132040

Kamal Saeed

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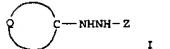
=> D L7 IBIB ABS HITSTR TOT

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L7 ANSWER 1 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:566558 CAPLUS  
 DOCUMENT NUMBER: 137:132040  
 TITLE: Diffusion-transfer color photographic material  
 INVENTOR(S): Fukagawa, Nobutaka; Ito, Takayuki  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.  
 CODEN: JKXKAF

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

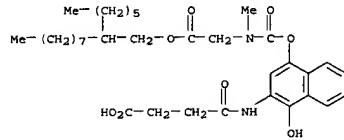
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002214752	A2	20020731	JP 2001-15105	20010123
OTHER SOURCE(S):	MARPAT	137:132040		
GI				



AB The diffusion-transfer color photog. material comprises a Ag halide photosensitive emulsion layer contg. a color development agent represented by I (Z = carbamoyl, acyl, alkoxy, etc.; and Q = at. group forming 5-7-membered unsatd. ring), a non-diffusive dye forming a diffusive dye upon reaction with an oxidn. product of the color development agent, and an internal latent image type direct pos. Ag halide emulsion. The use of the color development agent in the photog. emulsions provided high image d. and storage stability.

IT 443916-91-4  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (diffusion-transfer color photog. emulsion contg. color development agent)  
 RN 443916-91-4 CAPLUS  
 CN Butanoic acid, 4-[(4-[[[2-[(2-hexyldecyl)oxy]-2-oxoethyl]methylamino]carbonyl)oxy]-1-hydroxy-2-naphthalenyl]amino]-4-oxo-(9CI) (CA INDEX NAME)

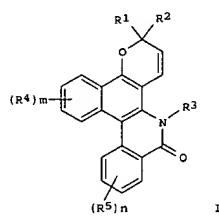
L7 ANSWER 1 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)



L7 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2002:327810 CAPLUS  
 DOCUMENT NUMBER: 136:341787  
 TITLE: Naphthopyrans annulated in C5-C6 with a lactam-type C6 ring and compositions and (co)polymer matrices containing them  
 INVENTOR(S): Breyne, Olivier  
 Corning S.A., Fr.  
 SOURCE: U.S., 13 pp.  
 CODEN: USXXAM

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

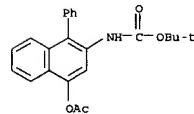
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6379591	B1	20020430	US 2000-590405	20000608
AU 2000054026	A5	20010102	AU 2000-54026	20000605
PRIORITY APPLN. INFO.:			FR 1999-7356	A 19990610
			WO 2000-EP5162	W 20000605
			US 2000-590405	A 20000608
OTHER SOURCE(S):	MARPAT	136:341787		
GI				



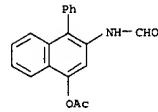
AB Invention relates to novel naphthopyran-type compds. having a lactam-type 6-membered ring annulated in position C5-C6. These compds. have the formula (I) given below: These compds. have interesting photochromic properties. The invention also relates to their prepn., to their applications as photochromes, as well as to the compns. and (co)polymer matrices contg. them.

IT 313377-99-0P 313378-01-7P  
 RL: IMP (Industrial manufacture); RCT (Reactant); PREP (Preparation);  
 RACT (Reactant or reagent)  
 (naphthopyrans annulated in C5-C6 with lactam-type C6 ring and compns. and (co)polymer matrixes contg. them)  
 RN 313377-99-0 CAPLUS  
 CN Carbamic acid, [4-(acetoxy)-1-phenyl-2-naphthalenyl]-, 1,1-dimethylethyl

L7 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 ester (9CI) (CA INDEX NAME)



RN 313378-01-7 CAPLUS  
 CN Formamide, N-[4-(acetoxy)-1-phenyl-2-naphthalenyl]- (9CI) (CA INDEX NAME)

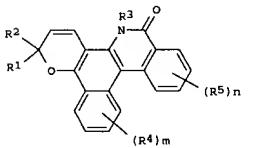


REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

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L7 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2000-900642 CAPLUS  
 DOCUMENT NUMBER: 134:57942  
 TITLE: Photochromic naphthopyrans annelated in C5-C6 with a lactam-type C6 ring, their production and their use  
 INVENTOR(S): Breyne, Olivier  
 PATENT ASSIGNEE(S): Corning S.A., Fr.  
 SOURCE: PCT Int. Appl., 31 pp.  
 CODEN: PIXHD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

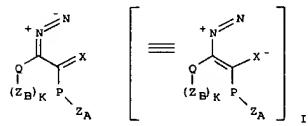
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000070005	A1	20001221	WO 2000-EP5162	20000605
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, PL, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TG, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, JU, MC, NL, PT, SE, BF, BJ, CP, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2794748	A1	20001215	FR 1999-7356	19990610
FR 2794748	B1	20010921		
AU 2000054026	A5	20010102	AU 2000-54026	20000605
BR 2000010980	A	20020305	BR 2000-10980	20000605
EP 1185533	A1	20020313	EP 2000-938761	20000605
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			FR 1999-7356 A 19990610	
			WO 2000-EP5162 W 20000605	
			US 2000-590405 A 20000608	
OTHER SOURCE(S): MARPAT 134:57942				
GI				



AB The photochromic dyes I (R<sub>1</sub>, R<sub>2</sub> = H, halogen, OH, NH<sub>2</sub>, org. group; R<sub>1</sub>R<sub>1</sub>

L7 ANSWER 4 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2000-638243 CAPLUS  
 DOCUMENT NUMBER: 133:245091  
 TITLE: Positive-working photosensitive composition  
 containing diazo dye for head-mode lithographic printing  
 material  
 INVENTOR(S): Kunita, Kazuto  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

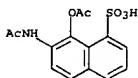
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000250207	A2	20000914	JP 1999-52845	19990301



AB The pos.-working photosensitive compn. comprises an alk. water sol. polymer and a diazo compd. represented by I (X = NR; R = Ph-NHR with pKa, ltoreq.14; O may form an aliph or arom. ring by combining with P; ZA, ZB = org. group; and k = 0, 1). The compn. may contain an IR absorber.

IT 292863-69-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (pos.-working photosensitive compn. contg. diazo dye for head-mode lithog. printing material)

RN 292863-69-5 CAPLUS  
 CN 1-Naphthalenesulfonic acid, 7-(acetylarnino)-8-(acetoxyloxy)- (9CI) (CA INDEX NAME)

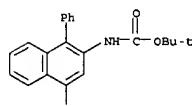


L7 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 may form a spiro hydrocarbon group; R3 = H, org. group; R4, R5 = halogen, NH2, org. group; m, n = 0-4) are obtained for solar or ophthalmic use and may be incorporated into polymers. I show rapid photochromic response. In an example, I (R1 = R2 = p-methoxyphenyl; R3 = R4 = R5 = H) was prep'd. from 4-hydroxy-1-phenyl-2-naphthalene carboxylic acid, incorporating acetic anhydride, diphenylphosphorazide, tert-Bu alc., formic acid, and 1,1-bis(p-methoxyphenyl)-1-propynol.

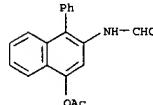
IT 313377-99-0P 313378-01-7P  
 RL: IMP (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT

(Reactant or reagent)  
 (intermediate; prodn. of photochromic naphthopyrane annelated in C5-C6 with lactam-type C6 ring)

RN 313377-99-0 CAPLUS  
 CN Carbamic acid, 4-(acetoxyloxy)-1-phenyl-2-naphthalenyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

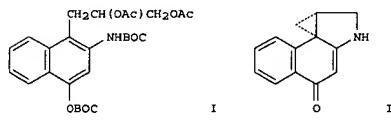


RN 313378-01-7 CAPLUS  
 CN Formamide, N-[4-(acetoxyloxy)-1-phenyl-2-naphthalenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

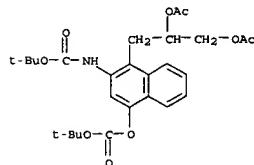
L7 ANSWER 5 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1997:770393 CAPLUS  
 DOCUMENT NUMBER: 128:61396  
 TITLE: A practical route to optically active CBI, a potent analog of the CC-1065 alkylation subunit  
 AUTHOR(S): Ling, Lei; Xie, Yu; Low, J. William  
 CORPORATE SOURCE: Dep. Chem., Univ. Alberta, Edmonton, T6G 2G2, Can.  
 SOURCE: Heterocyclic Communications (1997), 3(5), 405-408  
 PUBLISHER: Freund Publishing House Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB The CBI precursor (.-.)-I was resolved by lipase PS catalyzed hydrolysis in water-satd. iso-Pr ether. A practical route to optically active CBI (II), a potent analog of the CC-1065 pharmacophore, starting from the resolved material was thereby developed.

IT 200111-22-4P  
 RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)  
 (practical route to optically active cyclopropabenzindolone)

RN 200111-22-4 CAPLUS  
 CN Carbonic acid, 4-[2,3-bis(acetoxyloxy)propyl]-3-[(1,1-dimethylethoxy)carbonyl]amino-1-naphthalenyl 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



IT 200111-21-3P  
 RL: PUR (Purification or recovery); PREP (Preparation)  
 (practical route to optically active cyclopropabenzindolone)

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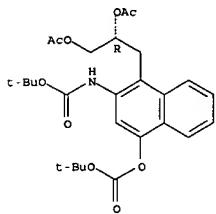
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L7 ANSWER 5 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 200111-21-3 CAPLUS

CN Carboxylic acid, 4-[2,3-bis(acetoxy)propyl]-3-[(1,1-dimethylethoxy)carbonyl]amino]-1-naphthalenyl 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



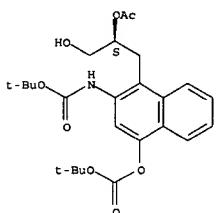
IT 200111-23-5P 200111-24-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); (practical route to optically active cyclopropabenzindolone)

RN 200111-23-5 CAPLUS

CN Carbonic acid, 4-[2-(acetoxy)-3-hydroxypropyl]-3-[(1,1-dimethylethoxy)carbonyl]amino]-1-naphthalenyl 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



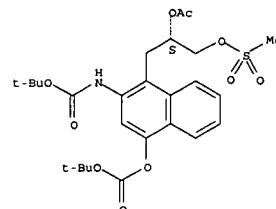
RN 200111-24-6 CAPLUS

CN Carbonic acid, 4-[2-(acetoxy)-3-[(methylsulfonyl)oxyl]propyl]-3-[(1,1-dimethylethoxy)carbonyl]amino]-1-naphthalenyl 1,1-dimethylethyl ester,

L7 ANSWER 5 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)

(S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

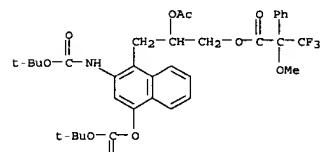


IT 200111-27-9P

RL: SPN (Synthetic preparation); PREP (Preparation); (practical route to optically active cyclopropabenzindolone)

RN 200111-27-9 CAPLUS

CN Benzenoacetic acid, .alpha.-methoxy-.alpha.-(trifluoromethyl)-, 2-(acetoxy)-3-[(1,1-dimethylethoxy)carbonyl]amino-4-[(1,1-dimethylethoxy)carbonyl]propyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:307629 CAPLUS

DOCUMENT NUMBER: 125:99934

TITLE: Silver halide color photographic material containing DIR coupler producing water-soluble dye to improve image quality

INVENTOR(S): Mizukawa, Hiroki; Kawagishi, Toshio; Nakagawa, Hajime

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 60 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

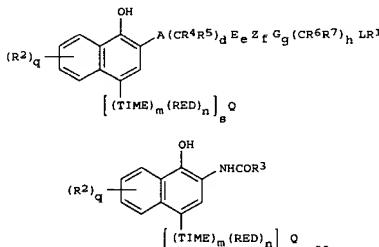
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08044011	A2	19960216	JP 1994-196294	19940729

GI



AB The claimed photog. material contains a naphthalene coupler I (A = CONH,

NHCO; R<sup>1</sup> = alkyl or aryl having 1 to <math>\leq</math> 10 C atoms, heterocyclic group;

R<sup>2</sup> = H, substituent; q = 0-4; R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> = H, substituent; d, h = 0-3;

E, G = O, S, CONH, NHCO, SO<sub>2</sub>NH, NHSO<sub>2</sub>; e, g = 0, 1; Z = bivalent linkage; L

SO<sub>2</sub>NHCO, CONHSO<sub>2</sub>; TIME = timing group to release (RED)<sub>n</sub>Q after cleavage from the naphthalene group; m = 1, 2; RED = group to release Q by the reaction with the oxidized developing agent; n = 0, 1; s = 1, 2; Q = development-inhibiting group) or II (R<sup>3</sup> = alkyl, aryl, heterocyclic group having 1 to <math>\leq</math> 10 C atoms and substituted by at least one of OH, CO<sub>2</sub>H, and SO<sub>3</sub>H). The DIR (development inhibitor releasing) coupler improves image sharpness, granularity, color reprodn. quality, and storage stability due to time-controlled release of the inhibitor. Another advantage is the wash-out property of the resulting dye, which improves color reprodn. quality. The photog. material is particularly suitable as a multilayer color neg. film.

L7 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)

IT 178563-61-6

RL: DEV (Device component use); USES (Uses) (silver halide color photog. material contg. DIR coupler producing water-sol. dye to improve image quality)

RN 178563-61-6 CAPLUS

CN Benzotriazole-5-carboxylic acid, N-[(hexadecyl[[4-hydroxy-3-[(3-hydroxy-1-

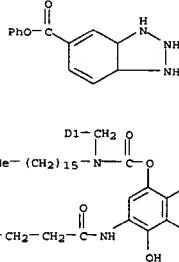
oxopropyl)amino]-1-naphthalenyl]oxy)carbonyl]amino)methyl]-, phenyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 178563-60-5

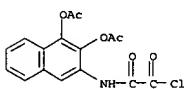
CMF C44 H59 NS O7

CCI IDS



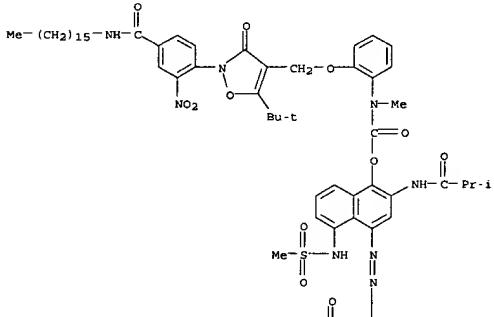
Kamal Saeed

L7 ANSWER 7 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1995-51752 CAPLUS  
 DOCUMENT NUMBER: 122:55762  
 TITLE: Synthesis and antibacterial activity of new ureido and dicarboxylic acid diamido derivatives of acylpenicillines  
 and with and without catechol substituents Heinisch, L.; Moellmann, U.; Tresselt, D.; Willitzer, H.  
 CORPORATE SOURCE: Hans-Knoell-Institute Naturstoff-Forschung, Jena, Germany  
 SOURCE: Arzneimittel-Forschung (1994), 44(3), 349-54  
 CODEN: ARZNAD, ISSN: 0004-4172  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB Ureido, oxamoyl, fumaramoyl and terephthalamoyl derivs. of ampicillin or amoxicillin were synthesized by reaction of (acylpenicillin with (dihydroxy)arylamines or (diacyloxy)arylamines. Corresponding compds. derived from 3,4-diacetoxyaniline showed significant increase of activity against pseudomonas and salmonella in contrast to derivs. without catechol substituents. No increase of activity was obes. by corresponding derivs. of bi- and tricyclic amines. Derivs. with oxamoyl, fumaramoyl or terephthalamoyl groups were found to be more active than the corresponding ureido derivs. Studies with mutants possessing higher membrane permeability have shown that the high activities of catechol contg. derivs. are connected with the improved penetration through the outer membrane. Some new penicillin derivs. are more stable against beta-lactamases compared with azlocillin.  
 IT 159788-34-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); (prepn. of (acyl)penicillin derivs. bactericides)  
 RN 159788-34-8 CAPLUS  
 CN Acetyl chloride, [(3,4-bis(acetoxy)-2-naphthalenyl]amino]oxo- (9CI)  
 (CA INDEX NAME)

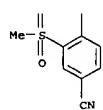


L7 ANSWER 8 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)

PAGE 1-A



PAGE 2-A



L7 ANSWER 8 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1994-231826 CAPLUS  
 DOCUMENT NUMBER: 120:231826  
 TITLE: Diffusion-transfer silver halide photographic material  
 material  
 INVENTOR(S): Uchida, Osamu; Matsuda, Naoto; Nakamura, Koki; Hirano, Katsumi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 75 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 559048	A1	19930908	EP 1993-102790	19930223
R: DE, FR, GB				
JP 05232659	A2	19930910	JP 1992-72114	19920224
JP 2722152	B2	19980304		

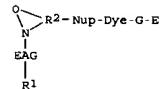
PRIORITY APPLN. INFO.: JP 1992-72114 19920224  
 AB A diffusion-transfer silver halide photog. material contains a dye-providing compd. having a dye portion temporarily shifted to a shorter wavelength. The dye-providing compd. represented by the formula REDOX-NuP-E-G-Dye, wherein G represents an auxochrome of a dye; Dye represents a group of atoms which remains after auxochrome is removed from the dye; -G-Dye represents a group of atoms which is converted to a diffusible dye by cleavage of the bond between G and E; REDOX represents an oxidative group or a reductive group which allows the bond between REDOX-NuP to be cleaved by an oxidn.-redn. reaction; NuP represents a nucleophilic group which is released by a bond cleavage reaction between REDOX and NuP triggered by the oxidn.-redn. reaction; and E represents an electrophilic group which will react with the nucleophilic group NuP and cause the bond between G and E to be cleaved.

IT 154076-02-5  
 RL: DEV (Device component use); USES (Uses); (diffusion-transfer color photog. films contg., as dye-providing compd.)  
 RN 154076-02-5 CAPLUS  
 CN Carbanic acid, [2-[5-(1,1-dimethylethyl)-2-[4-[(hexadecylamino)carbonyl]-2-nitrophenyl]-2,3-dihydro-3-oxo-4-isoxazolyl]methoxy]phenyl]-4-[[4-cyano-2-(methylsulfonyl)phenyl]azo]-2-[2-methyl-1-oxopropyl]amino]-5-[(methylsulfonyl)amino]-1-naphthalenyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 9 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1994-204454 CAPLUS  
 DOCUMENT NUMBER: 120:204454  
 TITLE: Diffusion transfer-type heat-developable color photographic material  
 INVENTOR(S): Kato, Masatoshi; Matsuda, Naoto  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 42 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05165141	A2	19930629	JP 1991-351256	19911213

OTHER SOURCE(S): MARPAT 120:204454  
 GI



AB In the title color photog. material possessing at least blue-, green-, and red-sensitive silver halide emulsion layers on a support, the green- and red-sensitive emulsion layers contain a dye-yielding compd. having a dye or its precursor, the absorption wavelength of which is temporarily shifted to the short wavelength side, and the av.-grain size of the blue-sensitive emulsion is about 1.2 times greater than those of the green- and red-sensitive emulsion. The dye-yielding compds. are represented by the formula REDOX-NuP-Dye-G-E (REDOX = group immobilizing the dye-yielding compd. in a photog. material and cleaving the REDOX-NuP bond upon reaction triggered by a redox reaction; NuP-Dye-G = a diffusion dye part; G = dye auxochrome; Dye = a group of atoms left after removing

G and NuP from the dye; NuP = nucleophilic group resulted from cleavage of the REDOX-NuP bond; E = electrophilic group cleaving the G-E bond upon reaction with the nucleophile NuP; the NuP-E bond formed by reaction of NuP and E may be cleaved by the subsequent reaction or transferred as E-NuP-Dye-G without cleavage). They are also represented by nonreducing dye-yielding compds. (I; R2 = a group of atoms to form a heterocyclic ring contg. a N-O single bond and to cleave the R2-NuP bond upon reaction triggered by the N-O single bond cleavage; EAG = electron-accepting group;

R1 = group required to immobilize the dye-yielding compd.; NuP, E, Dye = same as defined above). This diffusion-transfer color photog. material provides high sensitivity, high d., low fog, and excellent sensitivity balance with little fluctuation of sensitivity during storage.

IT 153613-63-9 153835-55-3

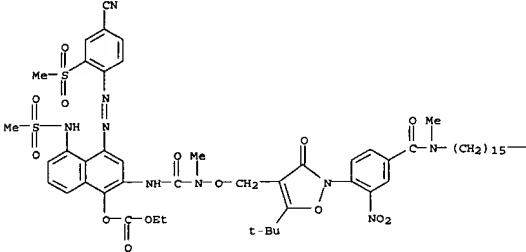
RL: USES (Uses)

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L7 ANSWER 9 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)  
(dye-yielding compd., heat-developable diffusion-transfer color  
photog. film)

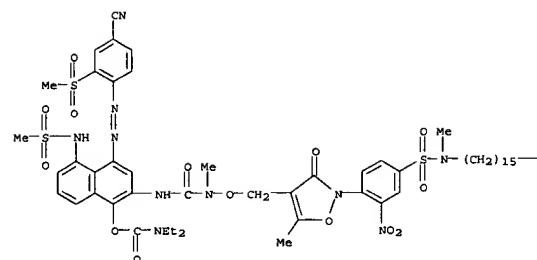
RN 153613-63-9 CAPLUS  
CN Carbonic acid, 4-[[4-cyano-2-(methylsulfonyl)phenyl]azo]-2-[[[[[5-(1,1-dimethylethyl)-2-[(hexadecylmethoxy)methylamino]carbonyl]-2-nitrophenyl]-2,3-dihydro-3-oxo-4-isoxazolyl]methoxy]methylamino]carbonyl]amino]-5-[(methylsulfonyl)amino]-1-naphthalenyl ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-A

L7 ANSWER 9 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)



PAGE 1-B

PAGE 1-B

— Me

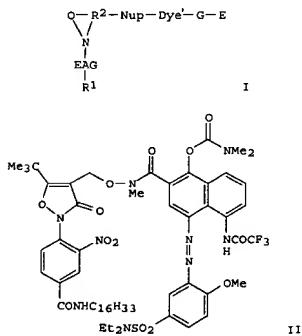
— Me

RN 153035-55-3 CAPLUS  
CN Carbamic acid, diethyl-, 4-[[4-cyano-2-(methylsulfonyl)phenyl]azo]-2-[[[[2-[(hexadecylmethoxy)methylamino]sulfonyl]-2-nitrophenyl]-2,3-dihydro-5-methyl-3-oxo-4-isoxazolyl]methoxy]methylamino]carbonyl]amino]-5-[(methylsulfonyl)amino]-1-naphthalenyl ethyl ester (9CI) (CA INDEX NAME)

L7 ANSWER 10 OF 29 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1994:178080 CAPLUS  
DOCUMENT NUMBER: 1201:178080  
TITLE: Diffusion-transfer silver halide color photographic material  
INVENTOR(S): Matauda, Naoto; Hirano, Kataumi; Uchida, Osamu  
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 67 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05107708	A2	19930430	JP 1991-297694	19911018

OTHER SOURCE(S): MARPAT 120:178080  
G1



AB The title photog. material contains on a support, at least silver halides, a binder, and an immobilized diffusion dye-yielding compd. represented by REDOX-Nup-Dye'-G-E (I; REDOX = group immobilizing the diffusion dye-yielding compd. and having the REDOX-Nup bond cleaved upon the reaction triggered by redn.-oxidn. reaction; the diffusion dye part is represented by Nup-Dye'-G; G = auxochrome of the dye; Dye' = a group of atoms left after removing G and Nup from the dye; Nup = group showing nucleophilicity as the result of the REDOX-Nup bond cleavage; E = electrophilic group cleaving the G-E bond upon reaction with Nup which has been turned into a nucleophilic group; the Nup-E bond formed by the

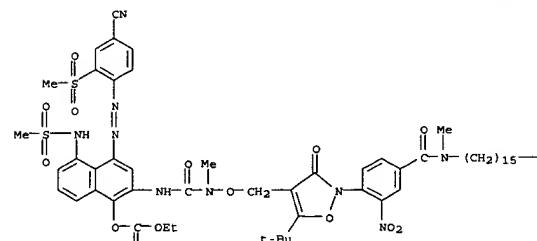
L7 ANSWER 10 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)  
reaction of Nup and E can be cleaved by the subsequent reaction or transferred as E-Nup-Dye'-G without being cleaved.). Preferably the diffusion dye-yielding compd. is represented by a nonreducing

dye-yielding compd. (II; R2 = a group of atoms which forms a heterocyclic ring contg. a N-O single bond and cleaves the R2-Nup bond by the reaction triggered by the cleavage of the N-O single bond; EAP = electron accepting group; R1 = group required to immobilize the diffusion dye-yielding compd.; Nup, G, E, Dye' = same as above), e.g. magenta dye-yielding isoxazole deriv. (III) (prepns. given). The absorption wavelengths of the dyes I and II dyes are temporarily shortened, which reduces filter effect on a spectrally sensitized silver halide emulsion and does not decrease the sensitivity of the emulsion when I and II are used in the same emulsion layer. The dyes I and II are used in the same layer with silver halide emulsion, show sufficient storage stability, promptly restore hue by the reaction triggered by redn.-oxidn. reaction during photog. processing, and provide a diffusion-transfer photog. material with high sensitivity.

IT 153613-63-9  
RL: USES (Uses)  
(redn.-oxidn. reaction-triggered cyan dye-yielding photog. dye, for diffusion-transfer photog. material)

RN 153613-63-9 CAPLUS  
CN Carbonic acid, 4-[[4-cyano-2-(methylsulfonyl)phenyl]azo]-2-[[[[[5-(1,1-dimethylethyl)-2-[(hexadecylmethoxy)methylamino]carbonyl]-2-nitrophenyl]-2,3-dihydro-3-oxo-4-isoxazolyl]methoxy]methylamino]carbonyl]amino]-5-[(methylsulfonyl)amino]-1-naphthalenyl ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



Kamal Saeed

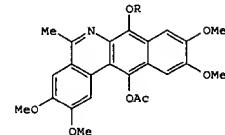
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L7 ANSWER 10 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)

PAGE 1-B

L7 ANSWER 11 OF 29 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1993:168967 CAPLUS  
DOCUMENT NUMBER: 118:168967  
TITLE: Synthesis of benzo[b]phenanthridines from  
2-amino-6,7-dimethoxy-3-(3,4-dimethoxyphenyl)-1,4-naphthoquinone  
AUTHOR(S): Gogishvili, T. I.; Kurkovskaya, L. N.; Akhvlediani,  
R. N.; Suvorov, N. N.  
CORPORATE SOURCE: Mosk. Khim.-Tekhnol. Inst., Moscow, Russia  
SOURCE: Zhurnal Organicheskoi Khimii (1992), 28(6), 1264-9  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
GI

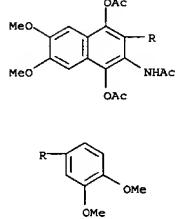
—Me



1

AB Benzo[b]phenanthridines I (R = H, Ac), contg. methoxy groups in rings A and D, which are active as antileukemics (no data), were prepd. from 2-amino-6,7-dimethoxy-3-(3,4-dimethoxyphenyl)-1,4-naphthoquinone by reductive acylation and Bischler-Napieralski cyclization.  
IT 146463-35-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and Bischler-Napieralski cyclization of)  
RN 146463-35-6 CAPLUS  
CN Acetamide, N-[1,4-bis(acetyloxy)-3-(3,4-dimethoxyphenyl)-6,7-dimethoxy-2-naphthalenyl]- (9CI) (CA INDEX NAME)

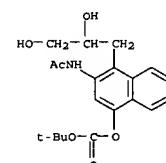
L7 ANSWER 11 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)



L7 ANSWER 12 OF 29 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1992:651105 CAPLUS  
DOCUMENT NUMBER: 117:251105  
TITLE: Synthesis of CBI-PDE-I-dimer, the benzannelated analog of CC-1065  
AUTHOR(S): Aristoff, Paul A.; Johnson, Paul D.  
CORPORATE SOURCE: Upjohn Co., Kalamazoo, MI, 49001, USA  
SOURCE: Journal of Organic Chemistry (1992), 57(23), 6234-9  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB A practical synthesis of CBI (I), utilizing inexpensive starting materials, was developed and applied to the synthesis of benzannelated analogs of CC-1065, in particular CBI-PDE-I-dimer II and CBI-bis-indole III. While a Sharpless asym. dihydroxylation reaction proved effective at providing optically active intermediates, a more classical resoln. procedure was used to prep. materials of higher optical purity. A novel cyclization employing a six-membered-ring intermediate (IV) was employed to construct the cyclopropyl ring in I. Like CC-1065, II appears to cause delayed toxicity in mice.  
IT 144191-95-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and mesylation of)  
RN 144191-95-7 CAPLUS  
CN Carbonic acid, 3-(acetylamino)-4-(2,3-dihydroxypropyl)-1-naphthalenyl 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

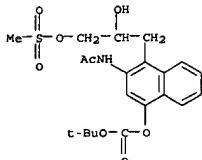


IT 144191-96-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and silylation of)  
RN 144191-96-8 CAPLUS  
CN Carbonic acid, 3-(acetylamino)-4-(2-hydroxy-3-[(methylsulfonyl)oxyl]propyl)-

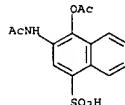
Kamal Saeed

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L7 ANSWER 12 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)  
1-naphthalenyl 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 13 OF 29 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1990:173673 CAPLUS  
DOCUMENT NUMBER: 112:173673  
TITLE: Identification of [<sup>14</sup>C]carmoisine metabolites in bacterial suspension of rat feces  
AUTHOR(S): Tragni, E.; Marinovich, M.; Ciuffreda, P.; Anastasia, M.; Ferrari, A.; Galli, C. L.  
CORPORATE SOURCE: Inst. Pharmacol. Sci., Univ. Milan, Milan, 20133, Italy  
SOURCE: Food Additives and Contaminants (1990), 7(1), 1-7  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB An in vitro system consisting of a bacterial suspension of human or rat fecal microflora brought about the biol. redn. of the red azo dye [<sup>14</sup>C]carmoisine to N-ethylamino-4-sulfonic acid (NA) and 2-amino-1-naphthol-4-sulfonic acid (ANA). These metabolites have been unequivocally identified by radio-HPLC, spectroscopic methods, diln. with cold authentic stds., and evidence that the specific activity of the dild. compds. remained const. throughout repeated crystn., acetylation, and purifn. The results clearly indicated that samples derived from anaerobic incubations have to be processed for anal. in the complete absence of oxygen. In the presence of oxygen, the formation of a complex pattern of compds. in addn. to NA was obsev. as a consequence of the chem. decompr. of ANA.  
IT 126617-30-9  
RL: SPN (Synthetic preparation); PREP (Preparation) (prep'n. of)  
RN 126617-30-9 CAPLUS  
CN 1-Naphthalenesulfonic acid, 3-(acetylamino)-4-(acetoxy)-, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)  
CM 1  
CRN 126617-29-6  
CMF C14 H13 N O6 S



CM 2  
CRN 110-86-1  
CMF C5 H5 N

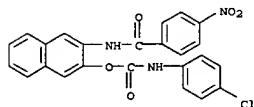
L7 ANSWER 14 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)



L7 ANSWER 14 OF 29 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1989:145091 CAPLUS  
DOCUMENT NUMBER: 110:145091  
TITLE: Diazo thermal recording materials  
INVENTOR(S): Watanabe, Jiro  
PATENT ASSIGNEE(S): Toppan Printing Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63242679	A2	19881007	JP 1987-77978	19870331

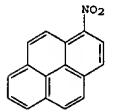
OTHER SOURCE(S): MARPAT 110:145091  
GI For diagram(s), see printed CA Issue.  
AB Thermal recording materials have recording layer contg. diazo compds., thermal developers, acids, polymer binders, and carbamic acid esters of the formula ArCONHAr1 [Ar, Ar1 = (substituted) hydrocarbyl] that produce an active diazo coupler upon heating. These materials provide a simple means of printing and give durable fixed copies with materials optionally selected for many purposes. Thus, a coating compn. contg. 1 part of a dispersion contg. 10% of the diazonium salt I, 5 parts of a dispersion contg. 5% II, and 20% di(N-decyldiquanidine) tartarate, and other agents was coated on a paper sheet to obtain the printing material, which gave blue thermal image with d. 1.32 and fog d. 0.07. The fog d. of the material was 0.09 when printed after storage at 40.degree. and 90% relative humidity for 2 days.  
IT 119686-59-8  
RL: USES (Uses)  
(diazo coupler precursor, thermal printing materials contg., for storage stability and low fog)  
RN 119686-59-8 CAPLUS  
CN Carbamic acid, (4-chlorophenyl)-, 3-[(4-nitrobenzoyl)amino]-2-naphthalenyl ester (9CI) (CA INDEX NAME)



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L7 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1984:605798 CAPLUS  
DOCUMENT NUMBER: 101:205798  
TITLE: Metabolism of 1-nitro[U-4,5,9,10-14C]pyrene in the F344 rat  
AUTHOR(S): El-Bayoumy, Karam; Hecht, Stephen S.  
CORPORATE SOURCE: Naylor Dana Inst. Dis. Prev., Am. Health Found., Valhalla, NY, 10595, USA  
SOURCE: Cancer Research (1984), 44(10), 4317-22  
CODEN: CNREAB; ISSN: 0008-5472  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB 14C-labeled 1-nitropyrene (I) [5522-43-0] was synthesized and administered to male F344 rats by intragastric gavage at a dose of 100 mg/kg. During the 1st 48 h, 41% of the dose was eliminated in the feces, and 16% was eliminated in the urine. The corresponding figures after 120 h were 51 and 19%. In rats with bile cannulae, 37% of the dose was excreted in the urine. Fecal metabolites included 1-aminopyrene [1606-67-3] (isolated amt., 11.7% of the dose), 1-amino-6-hydroxypyrene [1732-30-5] and 1-amino-8-hydroxypyrene [1732-31-6] (4.6%), and unchanged

I (6.6%). 1-Aminopyrene and the 1-aminohydroxypyrenes were identified as their acetyl derivs. by comparison of their chromatog. retention times, mass spectra, and UV spectra to those of synthetic stds. Biliary metabolites included 1-aminopyrene, 1-amino-6-hydroxypyrene, 1-amino-8-hydroxypyrene, 1-nitro-6(8)-hydroxypyrene [92997-50-7], and 1-nitro-3-hydroxypyrene [86674-49-9] as well as their glucuronide and sulfate conjugates. The isolated amts. of these metabolites accounted

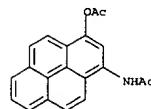
for approx. 5% of the dose. 1-Amino-6-hydroxypyrene and 1-amino-8-hydroxypyrene and their glucuronide and sulfate conjugates were also tentatively identified in the urine and accounted for approx. 3% of the dose. Significant quantities of unidentified water-sol. metabolites were present in the urine and bile. Thus, metabolic redn. of the highly mutagenic 1-nitrohydroxypyrenes occurs in vivo in the rat and this is a possible activation pathway in carcinogenesis.

IT 93090-84-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

RN 93090-84-7 CAPLUS

L7 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)  
CN Acetamide, N-[3-(acetoxy)-1-pyrenyl]- (9CI) (CA INDEX NAME)



L7 ANSWER 16 OF 29 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1981:532825 CAPLUS  
DOCUMENT NUMBER: 95:132825  
TITLE: Total synthesis of rifamycin S  
AUTHOR(S): Kishi, Yoshito  
CORPORATE SOURCE: Dep. Chem., Harvard Univ., Cambridge, MA, 02138, USA  
SOURCE: Pure and Applied Chemistry (1981), 53(6), 1163-80  
CODEN: PACHAS; ISSN: 0033-4545  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

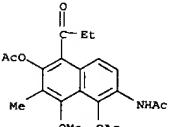
AB The multistep total synthesis of rifamycin S (I) is described. The crit. step was the condensation reaction of the aliph. component II with the arom. component III (K2CO3/DMF, room temp.) to give a trans-alkenoate Me ester which cyclized (MgI2/Et2O/C6H6, room temp.) to give I.

IT 78377-76-1P

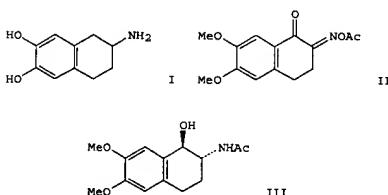
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for rifamycin S total synthesis)

RN 78377-76-1 CAPLUS

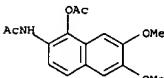
CN Acetamide, N-[1,6-bis(acetoxy)-8-methoxy-7-methyl-5-(1-oxopropyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)



L7 ANSWER 17 OF 29 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1981:480540 CAPLUS  
DOCUMENT NUMBER: 95:80540  
TITLE: Modified synthesis of 2-amino-6,7-dihydroxy-1,2,3,4-tetrahydronaphthalene  
AUTHOR(S): Schroetter, E.; Buente, B.; Schick, H.; Niedrich, H.  
CORPORATE SOURCE: Inst. Wirkstoffforsch. DAW, Berlin, Ger. Dem. Rep.  
SOURCE: Pharmazie (1981), 36(2), 88-91  
CODEN: PHARAT; ISSN: 0031-7144  
DOCUMENT TYPE: Journal  
LANGUAGE: German  
GI



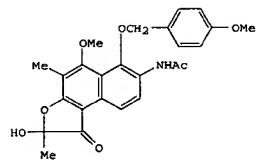
AB The title compd. (I) was prep'd. from veratrole and succinic anhydride in 9 steps via oxime II and alc. III.  
IT 78579-42-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)  
RN 78579-42-7 CAPLUS  
CN Acetamide, N-[1-(acetoxy)-6,7-dimethoxy-2-naphthalenyl]- (9CI) (CA INDEX NAME)



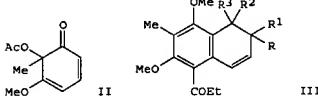
Kamal Saeed

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L7 ANSWER 18 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1981:461887 CAPLUS  
 DOCUMENT NUMBER: 95:61887  
 TITLE: A synthesis of the aromatic segment of rifamycin S  
 AUTHOR(S): Nagao, Hiroto; Schmid, Gerard; Iio, Hideo; Kishi, Yoshito  
 CORPORATE SOURCE: Dep. Chem., Harvard Univ., Cambridge, MA, 02138, USA  
 SOURCE: Tetrahedron Letters (1981), 22(10), 899-902  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



I



II



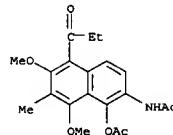
III

AB The arom. segment I of rifamycin S, an antibiotic isolated from *Norcardia mediterranei*, was prep'd. in 16 steps from the cyclohexadienone II in good yield. A key step was the reaction of the naphthoquinone III (R<sub>1</sub> = R<sub>2</sub> = O) (IV) with H<sub>2</sub>NOH.HCl in EtOH at room temp. to give the mono-oxime III (R<sub>1</sub> = NOH, R<sub>2</sub> = O) which on hydrogenation and acetylation gave III (R<sub>1</sub> = NHAc, R<sub>2</sub> = bond, R<sub>3</sub> = OAc) (V). The overall yield of V from IV was 98%.

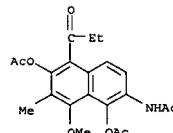
IT 78377-73-8P 78377-76-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as intermediate in total synthesis of rifamycin S segment)

RN 78377-73-8 CAPLUS  
 CN Acetamide, N-[1-(acetylxyloxy)-6,8-dimethoxy-7-methyl-5-(1-oxopropyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)

L7 ANSWER 18 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)



RN 78377-76-1 CAPLUS  
 CN Acetamide, N-[1,6-bis(acetylxyloxy)-8-methoxy-7-methyl-5-(1-oxopropyl)-2-naphthalenyl]- (9CI) (CA INDEX NAME)



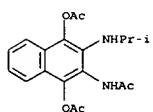
L7 ANSWER 19 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1979:470013 CAPLUS  
 DOCUMENT NUMBER: 91:70013  
 TITLE: Herbicidal compositions containing 1,4-quinones or derivatives thereof  
 INVENTOR(S): Entwistle, Ian David; Gilkerson, Terence; Devlin, Barry Roy John  
 PATENT ASSIGNEE(S): Shell Internationale Research Maatschappij B. V., Neth.  
 SOURCE: Brit., 12 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1534275	A	19781129	GB 1975-4104	19760130

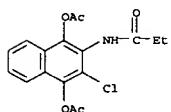
AB Herbicidal 1,4-quinones and derivs. were prep'd. E.g., 2-methylamino-3-(3-methylureido)-1,4-naphthoquinone (I) [70820-05-2] was prep'd. by reaction of 3-amino-2-methylamino-1,4-naphthoquinone [13750-98-6] with Me isocyanate. A postemergence foliar spray of I (10 kg/ha) gave an approx. 95% redn. in fresh wt. and leaf of sugar beet seedlings.

IT 63837-80-9P 70820-14-3P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and herbicidal activity of)

RN 63837-80-9 CAPLUS  
 CN Acetamide,  
 N-[1,4-bis(acetylxyloxy)-3-[(1-methylethyl)amino]-2-naphthalenyl]- (9CI) (CA INDEX NAME)



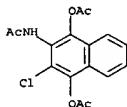
RN 70820-14-3 CAPLUS  
 CN Propanamide, N-[1,4-bis(acetylxyloxy)-3-chloro-2-naphthalenyl]- (9CI) (CA INDEX NAME)



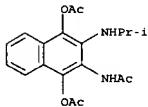
Kamal Saeed

09894798

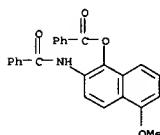
L7 ANSWER 20 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1977:484709 CAPLUS  
 DOCUMENT NUMBER: 67:84709  
 TITLE: Catalytic transfer reduction of quinones  
 AUTHOR(S): Entwistle, Ian D.; Johnstone, Robert A. W.; Telford, Robert P.  
 CORPORATE SOURCE: Shell Biosci. Lab., Sittingbourne, UK  
 SOURCE: Journal of Chemical Research, Synopses (1977), (5), 117  
 CODEN: JRRSDC; ISSN: 0308-2342  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Quinones were reduced to hydroquinones by cyclohexene, aq. H<sub>2</sub>P(O)OH or eq. H<sub>2</sub>P(O)Na in the presence of Pd/C. E.g., dropwise addn. of eq. H<sub>2</sub>P(O)OH to 1,4-naphthoquinone in refluxing THF followed by acetylation gave 62% 1,4-(AcO)<sub>2</sub>C<sub>10</sub>H<sub>6</sub>. Similarly, 1,4-benzoquinone gave 70-80% 1,4-(HO)<sub>2</sub>C<sub>6</sub>H<sub>4</sub>. The products were acetylated if susceptible to aerial oxidn. Functional groups other than NO<sub>2</sub> were unaffected.  
 IT 27824-55-19 63837-80-9  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prep. of, by catalytic transfer redn.)  
 RN 27824-55-1 CAPLUS  
 CN Acetamide, N-[1,4-bis(acetoxy)-3-chloro-2-naphthalenyl]- (9CI) (CA INDEX NAME)



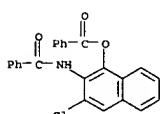
RN 63837-80-9 CAPLUS  
 CN Acetamide,  
 N-[1,4-bis(acetoxy)-3-[(1-methylethyl)amino]-2-naphthalenyl]- (9CI) (CA INDEX NAME)



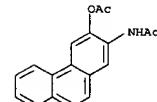
L7 ANSWER 22 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1972:551291 CAPLUS  
 DOCUMENT NUMBER: 77:151291  
 TITLE: Controlled potential electrochemical reduction of substituted nitronaphthalenes. II. Substituent effects  
 AUTHOR(S): Jubault, Michel; Peltier, Daniel  
 CORPORATE SOURCE: Lab. Chim. Anal., Univ. Rennes, Rennes, Fr.  
 SOURCE: Bull. Soc. Chim. Fr. (1972), (4), 1551-61  
 CODEN: BSCFAS  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 GI For diagram(s), see printed CA Issue.  
 AB The MeO group in naphthylhydroxylamines I (R = OMe) promotes their stability, while I (R = OH, NH<sub>2</sub>) are less stable. The stability of the isomers of I (R = Cl) and their rearrangement reactions are discussed. Data are given for the electrochem. redn. of nitronaphthalenes II (R = OMe, OH, NH<sub>2</sub>, NO<sub>2</sub>, Cl, CN, CO<sub>2</sub>H) to the corresponding I.  
 IT 38410-26-3P 38410-39-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prep. of)  
 RN 38410-26-3 CAPLUS  
 CN Benzamide, N-[1-(benzoyloxy)-5-methoxy-2-naphthalenyl]- (9CI) (CA INDEX NAME)



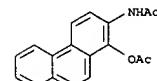
RN 38410-39-8 CAPLUS  
 CN Benzamide, N-[1-(benzoyloxy)-3-chloro-2-naphthalenyl]- (9CI) (CA INDEX NAME)



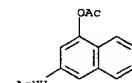
L7 ANSWER 21 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1974:520304 CAPLUS  
 DOCUMENT NUMBER: 81:120304  
 TITLE: Synthesis and reactions of some carcinogenic N-(2-phenanthryl)hydroxylamine derivatives  
 AUTHOR(S): Calder, I. C.; Williams, P. J.  
 CORPORATE SOURCE: Dep. Chem., Univ. Melbourne, Parkville, Australia  
 SOURCE: Australian Journal of Chemistry (1974), 27(8), 1791-5  
 CODEN: AJCHAS; ISSN: 0004-9425  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The synthesis of 2-nitrophenanthrene from 9,10-dihydrophenanthrene is reported. Some N-(2-phenanthryl)hydroxylamine derivs. have been prep'd. and the structure of the rearrangement products detd.  
 IT 53535-41-4P 53856-19-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prep. of)  
 RN 53535-41-4 CAPLUS  
 CN Acetamide, N-(3-(acetoxy)-2-phenanthrenyl)- (9CI) (CA INDEX NAME)



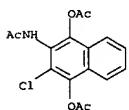
RN 53856-19-2 CAPLUS  
 CN Acetamide, N-[1-(acetoxy)-2-phenanthrenyl]- (9CI) (CA INDEX NAME)



L7 ANSWER 23 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1970:509009 CAPLUS  
 DOCUMENT NUMBER: 73:109009  
 TITLE: Reactions of ethyl azidoformate with aromatic compounds. I. Naphthalene, 2,3-dimethoxynaphthalene, veratrole, and N-methylquinol-4-one  
 AUTHOR(S): Chauhan, M. S.; Cooke, Raymond G.  
 CORPORATE SOURCE: Dep. Org. Chem., Univ. Melbourne, Parkville, Aust.  
 SOURCE: Aust. J. Chem. (1970), 23(10), 2133-40  
 CODEN: AJCHAS  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A study has been made of the photochem. and thermal reactions of Et azidoformate with four aromatic compds. selected to provide a wide range of electron distribution and reactivity. Examples of substitution, addn., and insertion reactions have been observed and the nature and yields of products under different conditions are discussed in relation to the mechanisms proposed for these reactions.  
 IT 2765-13-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prep. of)  
 RN 2765-13-1 CAPLUS  
 CN Acetamide, N-[4-(acetoxy)-2-naphthalenyl]- (9CI) (CA INDEX NAME)

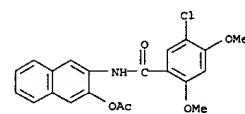


L7 ANSWER 24 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1970:401190 CAPLUS  
 DOCUMENT NUMBER: 73:1190  
 TITLE: Antimicrobial properties of some naphthoquinones  
 AUTHOR(S): Vladimirtsev, I. F.; Bilich, B. E.; Cherkesov, V. M.;  
 Dyachenko, S. S.  
 CORPORATE SOURCE: Inst. Org. Khim., Kiev, USSR  
 SOURCE: Fiziol. Aktiv. Veshchestva (1969), No. 2, 121-4  
 CODEN: PAVUAI  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 GI For diagram(s), see printed CA Issue.  
 AB The action of Ia was investigated on *Staphylococcus aureus* 209, *Bacterium coli* commune [*Escherichia coli*] and *Candida albicans*. The following Ia were tested: R1 = Cl, R2 = H; R1 = Cl, R2 = Cl(I); R1 = NH2, R2 = H (II); R1 = NH2, R2 = Cl (III); R1 = ONa, R2 = Cl; R1 = ONa, R2 = NO2; R1 = OMe, R2 = H; R1 = H, R2 = NHCOH4SO2NH2-p; R1 = OH, R2 = CH:CHCOO2H and IV  
 The most effective in preventing the growth of *C. albicans* was III (15 .gamma./ml), followed by II (30 .gamma./ml) and I (100 .gamma./ml).  
 IT 27824-55-1  
 RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)  
 (antimicrobial activity of)  
 RN 27824-55-1 CAPLUS  
 CN Acetamide, N-[1,4-bis(acetoxy)-3-chloro-2-naphthalenyl]- (9CI) (CA INDEX NAME)



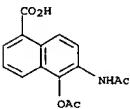
L7 ANSWER 26 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1966:93220 CAPLUS  
 DOCUMENT NUMBER: 64:93220  
 ORIGINAL REFERENCE NO.: 64:17506b-h,17507a-f  
 TITLE: Synthesis of aminohydroxynaphthoic acids having possible tuberculostatic action  
 AUTHOR(S): Girardet, A.; Russo, N. Lo  
 CORPORATE SOURCE: Univ. Lausanne, Fr.  
 SOURCE: Helv. Chim. Acta (1966), 49(1), 471-81  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 GI For diagram(s), see printed CA Issue.  
 AB cf. Goodacre, et al., CA 43, 1154e. Because of the tuberculostatic property of p-aminosalicylic acid, the following substituted 1-naphthoic acids were prep'd. for testing: 5-hydroxy-8-amino (I), 5-hydroxy-6-amino (II), 7-hydroxy-8-amino (III), 5-amino-8-hydroxy (IV), and 7-amino-8-hydroxy (V). All are susceptible to air oxidn., but the Ac derivs. are stable. Each except II forms a lactone (or a lactam) when boiled with 2 N HCl. The starting materials were 1-amino-5-naphthalenesulfonic (Va) and 1-amino-7-naphthalenesulfonic (Vb), which gave, resp., via Sandmeyer reaction followed by KOH fusion 5-hydroxy-1-naphthoic (VI) and 7-hydroxy-1-naphthoic (VII) acids. These were coupled with diazonobenzene, and the resulting acids, 5-hydroxy-8-phenylazo-1-naphthoic (VIII), 5-hydroxy-6-phenylazo-1-naphthoic (IX), and 7-hydroxy-8-phenylazo-1-naphthoic (X), were reduced by Na2S2O4 to I, II, and III, resp. IV was obtained from I by FeCl3 oxidn. to 1-carboxy-5,8-naphthoquinone (XI) followed by condensation with p-nitrophenylhydrazine (XII) and redn. of the resulting 5-(p-nitrophenylazo)-8-hydroxy-1-naphthoic acid (XIII). V resulted similarly from III (oxidn. by dil. HNO3), the intermediate being 1-carboxy-7,8-naphthoquinone (XIV) and 7-(p-nitrophenylazo)-8-hydroxy-1-naphthoic acid (XV). Both the coupling and the condensation reactions were complicated by the instability of the peri-phenylazo isomers, which cyclized to cinnoline derivs. Thus, VIII cyclized spontaneously to 2-phenyl-3,7-dioxo-2,3-dihydro-7H-benz[de]cinnoline (XVI). X cyclized only with hot dil. HCl, giving 2-phenyl-3,9-dioxo-2,3-dihydro-9H-benz[de]cinnoline (XVII). Similarly, XI gave, in addn. to a 6% yield of XII, 18% of the isomer 5-hydroxy-8-(p-nitrophenylazo)-1-naphthoic acid, which cyclized spontaneously to 2-(p-nitrophenyl)-3,7-dioxo-2,3-dihydro-7H-benz[de]cinnoline (XVIII). XVI dissolved in boiling 10% NaOH with ring scission, and consequently was readily reduced to I. XIII was extd. from its mixt. with XVIII with aq. NaOH, and was reduced to IV. The nitrilosulfonic acid from 22.3 g. Va, pptd. by salting out with NaCl at 0.degree., was purified by boiling with dil. aq. Na2S2O4 and again salting out. KOH fusion, first at 150.degree., finally at 260.degree., gave 60% VI, m. 236-7.degree. (dil. aq.); Et ester, 76% yield, m. 113.degree. (C6H6-petr. ether 1:1), b13 218-20.degree.. A soln. of 19 g. VI in 1200 cc. H2O contg. 40.8 g. NaOAc was treated at 20.degree. with 0.1 mole diazotized PhNH2; the pptd. red product contained 33% IX, which was isolated by repeated extn. with aq. Na2CO3, leaving the insol. XVI in 64% yield. This was increased to 90% thus: A soln. of 19 g. VI in 400 cc. H2O contg. 12 g. NaOH was treated at 0.degree. with a soln. of 0.1 mole diazotized PhNH2, and the mixt. acidified with HCl, boiled, cooled, and the resulting red ppt. extd. with aq. Na2CO3 to remove approx. 7% IX. An aliquot of the residual XVI, crystd. from EtOH or AcOH, m. 202-3.degree..

L7 ANSWER 25 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1967:470645 CAPLUS  
 DOCUMENT NUMBER: 67:70645  
 TITLE: Histochemical detection of nonspecific esterases. I. Conditions for application of various naphthol-AS substrates and diazonium salts  
 AUTHOR(S): Vadász, Gy.; Possány, Zoltán; Bacsy, Erno  
 CORPORATE SOURCE: Akad. Wiss., Budapest, Hung.  
 SOURCE: Acta Histochim. (1967), 27(2), 331-8  
 CODEN: AHISB9  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB The conditions influencing the applicability of different naphthol-AS substrates and different diazonium salts for the histochem. demonstration of nonspecific esterases were examd. On application of 9 substrates and 3 diazonium salts of 3 usual compds. of the incubation soln. a total of 81 combinations was examd. The activity of the enzyme was influenced by all the conditions. The enzyme activity was mainly dependent on the substrate.  
 IT 17093-69-5  
 RL: BIOL (Biological study)  
 (in esterase detection)  
 RN 17093-69-5 CAPLUS  
 CN 2-Naphthalanilide, 5'-chloro-3-hydroxy-2',4'-dimethoxy-, acetate (ester) (8CI) (CA INDEX NAME)



L7 ANSWER 26 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 IX, pptd. from the aq. Na2CO3 ext., m. 250-1.degree. (EtOH). A mixt. of 3.24 g. VI Et ester in 45 cc. EtOH and 6.1 g. NaOAc in 10 cc. H2O was treated at 60-70.degree. with a soln. of 0.015 mole diazotized PhNH2 to give 1.7 g. insol. XVI and 2.1 g. IX Et ester, m. 154-5.degree. (EtOH). XVI (27.4 g.) was refluxed with 200 cc. 10% NaOH until dissolved, the soln. filtered, dild. with 300 cc. H2O, and 53 g. Na2S2O4 was stirred in at room temp. to give I quant.; no org. solvent was found suitable for crystn. A portion was refluxed 0.5 hr. with excess 2N HCl, and the soln. filtered rapidly at the b.p.; the cooled filtrate gave 5-hydroxynaphthoestryl (XIX), brown-orange crystals, which sublimed partially without melting up to 200.degree.. XIX (5 g.) refluxed 2 hrs. with 100 cc. Ac2O gave 5-acetoxy-N-acetylnaphthoestryl (XX), m. 164-5.degree. (EtOH). A soln. of 2.7 g. XX in 100 cc. hot 10% NaOH was cooled and acidified with dil. HCl to ppt. 5-hydroxy-8-acetamido-1-naphthoic acid (XXI), m. 234-6.degree. (H2O). A suspension of 2 g. I in 40 cc. H2O, stirred with 15 cc. Ac2O and heated at 100.degree. until dissolved, gave XXI, m. 234-6.degree.. A soln. of 29.2 g. IX in 500 cc. H2O contg. 20 g. NaOH was treated with 53 g. Na2S2O4 to give II; no suitable org. solvent was found. A soln. of 2 g. II in 25 cc. H2O contg. 0.4 g. NaOH and a few mg. of Na2S2O4 was shaken vigorously with 2 g. Ac2O and heated 5 min. at 100.degree. to give 5-hydroxy-6-acetamido-1-naphthoic acid, m. 223-4.degree. (50% AcOH). II (5 g.) refluxed 1 hr. with 20 cc. Ac2O gave 5-acetoxy-6-acetamido-1-naphthoic acid, m. 236-7.degree. (dioxane). A soln. of 23.9 g. I.HCl in 200 cc. H2O contg. 24 cc. concd. HCl and 65 g. FeCl3.6H2O was stirred 3 hrs. at room temp., giving a quant. yield of XI, m. 205-10.degree. (decompd. 190.degree.). XI (0.3 g.) was heated with a mixt. of 5 cc. Ac2O and 0.5 cc. H2S2O4 a few min. at 100.degree. to give 5,6-diacetoxo-8-hydroxynaphthoic lactone (XXII), m. 153.degree. (EtOH). A soln. of 1.6 g. XII in 35 cc. H2O contg. 5 cc. concd. HCl was added to a suspension of 2 g. XI in 40 cc. AcOH at 40.degree. and the mixt. kept 4 hrs. at room temp. to give 6% red XII, m. 222-4.degree. (dioxane), and 18% XVIII, m. 205-7.degree. (xylene). XII (3 g.) was purified as the Na salt via concd. NaOH, and the regenerated XII was heated with 70 cc. Ac2O contg. a little H2S2O4 and the soln. cooled and poured into 200 cc. H2O. The slurry was heated to 100.degree. and cooled giving orange 5-(p-nitrophenylazo)-8-hydroxynaphthoic lactone, m. 232-3.degree. (EtOH). Purified XIII (6.7 g.) was dissolved in 500 cc. H2O contg. 6.5 g. NaOH, boiled, filtered, and the blue filtrate treated with 24 g. Na2S2O4 at 50-60.degree.. A color change from blue to red to light yellow occurred within a few min., and the soln. was filtered directly into 10% AcOH giving light red IV in 75% yield. IV (2 g.) was refluxed 0.5 hr. with 20 cc. Ac2O, the soln. poured into 100 cc. H2O and heated to 100.degree. giving putative 5-diacylamino-8-hydroxynaphthoic lactone (XXXIII), m. 183-4.degree.. The nitrilosulfonic acid from 22.3 g. VI was isolated by evapn. of the filtrate from the Sandmeyer reaction and the crude material was fused with KOH to yield 45% VII. To a soln. of 19 g. VII in 200 cc. H2O contg. 16 g. NaOH was added with stirring at 0.5 degree. a soln. of 0.1 mole of diazotized PhNH2; after stirring 0.5 hr. dil. AcOH was added giving a quant. yield of Na2S2O4. III was dehydrated to 7-hydroxynaphthoestryl (XXIV), m. >300.degree.. Refluxing 5 g. III with 100 cc. Ac2O for 2 hrs. gave

L7 ANSWER 26 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 7-acetoxy-N-acetylnaphthostyryl (XXV), m. 139.degree. (EtOH). XXV (1 g.) was warmed 5 min. at 60.degree. with 10 cc. 5% aq. KOH, then the undissolved residue with 5 cc. 5% KOH at 100.degree. until dissolved; this stepwise sapon. gave 7-hydroxy-N-acetylnaphthostyryl (XXVI), m. 205.6.degree. (EtOH). III (1 g.) stirred in the cold with excess Ac2O and kept 0.5 hr. gave XXVI. To a mixt. of 100 cc. HNO3 and 100 cc. H2O 23.9 g. III.HCl was added portionwise during 1 hr. and the soln. stirred 2 hrs. to give orange XIV, m. 216-17.degree. (AcOH). A portion of XIV was boiled in dioxane with a mole-equiv. of .omircron.-phenylenediamine and the soln. let stand 15 min. to give citron-yellow quinoxaline deriv., m. 255.9.degree. (EtOH). XIV gave 5,7-diacetoxo-8-hydroxynaphthoic lactone, m. 131-3.degree. (EtOH). A suspension of 10.1 g. XIV in 200 cc. N HCl was stirred with a soln. of 7.8 g. XII in 150 cc. AcOH and the mixt. kept overnight to give 14 g. red XV, m. 284.degree.. A suspension of 3.37 g. XV in 100 cc. Ac2O was treated with a few drops of H2SO4 and let stand 15 min. to give orange 7-(*p*-nitrophenylazo)-8-hydroxynaphthoic lactone, m. 255.6.degree. (AcOH). XV was reduced to V in 80% yield. V was oxidized with acidified FeCl3 to XIV. V was dehydrated to give 7-acetamido-8-hydroxy-1-naphthoic lactone, m. 234-5.degree. (EtOH). IT 5385-98-9. 1-Naphthoic acid, 6-acetamido-5-hydroxy-, acetate (prepn. of)  
 RN 5385-99-9 CAPLUS  
 CN 1-Naphthoic acid, 6-acetamido-5-hydroxy-, acetate (7CI, 8CI) (CA INDEX NAME)



L7 ANSWER 27 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 cc. EtOH contg. 3 drops concd. HCl. IV with .omircron.-phenylene-diamine gave IV quinoxaline deriv., m. 233-4.degree. (benzene). V quinoxaline deriv., m. 252.degree. Oxidn. of IV or V in pyridine soln. with KMnO4 gave phthalic acid, identified as phthalanil, m.p. and mixed m.p. 205.6.degree.. To a soln. of 200 mg. IV in 80 cc. AcOH contg. 6 cc. concd. H2SO4 was added dropwise 5 cc. 30% H2O2 during 1 hr. at 40.degree.. After standing 1 hr. at 40.degree., the soln. was concd. in vacuo to 10 cc. and dild. with 10 cc. H2O. The pptd. 1-phenyl-3-(*o*-carboxyphenyl)pyrazole-4-carboxylic acid (IX) m. 284.5.degree. (decompn.) (AcOH), yield 180 mg. Similarly prep. was 1-(*p*-tolyl)-3-(*o*-carboxyphenyl)pyrazole-4-carboxylic acid, m. 300-2.degree.. A mixt. of 200 mg. IX and 200 mg. Cu powder was heated at 285-95.degree. for 10 min. at 5 mm. The sublimate gave 130 mg. 1,3-diphenylpyrazole (X), m. 84.0-4.5.degree. (EtOH). M.p., mixed m.p., and ir spectra were identical with those of an authentic sample. Coupling of 500 mg. 5-bromo-3,4-benzotropolone with benzenediazonium chloride from 240 mg. aniline gave 150 mg. of an uncharacterized azo compd., C17H11O2N2Br, red, m. 160-1.degree.. Coupling of 500 mg. 5,7-dibromo-3,4-benzotropolone (XI) with benzenediazonium chloride from 185 mg. aniline gave 2-phenylazo-4-bromo-1-naphthol (XII), red, m. 178.5.degree.; yield, prep., in AcOH soln. 140 mg.; yield in pyridine soln. 110 mg. 2-Phenylazo-4-chloro-1-naphthol (XIII), red, m. 160.degree., yield 29%; and 2-(*p*-tolylazo)-4-bromo-1-naphthol, reddish orange, m. 183-4.degree., yield 29%, were similarly prep. The latter compd. showed no m.p. depression on mixt. with a sample prep'd. by coupling 4-bromo-1-naphthol with *p*-toluenediazonium chloride in pyridine soln. To a suspension of 100 mg. XII and 500 mg. fused NaOAc in 3 cc. Ac2O was added 300 mg. Zn powder in portions. Excess Ac2O was decompd. with H2O and the ppt. worked up to give 65 mg. 1-acetoxy-2-acetamido-4-bromonaphthalene, m. 232.degree.. (EtOAc). XIII similarly gave 68% 1-acetoxy-2-acetamido-4-chloronaphthalene, m. 195-200.degree.. To a soln. of 500 mg. III in a mixt. of 20 cc. 0.4N KOH and 8 cc. pyridine was added dropwise (ice cooling) during 2 hrs. a soln. of 450 mg. K2S2O8 in 15 cc. H2O. After standing 3 days in an ice chest, 100 cc. concd. HCl was added. The pptd. product, on recrystn. from EtOH gave 210 mg. unchanged III (m.p. and mixed m.p. 147.degree.) and 150 mg. 5(?) -hydroxy-7-bromo-3,4-benzotropolone (XIV), yellow, m. 317-20.degree. after darkening at 180.degree.. A soln. of 300 mg. III Me ether in a mixt. of 15 cc. MeOH and 1.2 g. 50% KOH was kept for 10 hrs. at room temp. The mixt. was acidified with dil. HCl, concd., and the product worked up to give 165 mg.

6-hydroxy-7-methoxy-2,3-benzotropone-H2O, m. 103.5-4.5.degree. (dil. EtOH). The anhyd. product (XV) was obtained by drying over P2O5 2 days. A soln. of 100 mg. XV in 2 cc. concd. HCl was heated in a sealed tube at 135-40.degree. 5 hrs. The soln. was dild. to give 65 mg. 6,7-dihydroxy-2,3-benzotropone, m. 133.5.degree. (H2O). Bromination of 200 mg. XV in 2 cc. AcOH with 320 mg. Br gave an immediate pptn. of a reddish violet intermediate product. The whole was heated 1 hr. on a water bath and the mixt. dild. to give 4(?) -bromo-6,7-dihydroxy-2,3-benzotropone, m. 198.5.degree. (EtOH). The intermediate product regenerated XV on heating in H2O. After standing overnight at room temp., a soln. of 300 mg. XI Me ether in 60 cc. MeOH contg. 1.2 g. 50% KOH was acidified with dil. HCl and evapd. to give 180 mg.

Kamal Saeed

L7 ANSWER 27 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1866-43609 CAPLUS  
 DOCUMENT NUMBER: 64:43609  
 ORIGINAL REFERENCE NO.: 64:8105d-h,8106a-f  
 TITLE: 3,4-Benzotropolone and related compounds. IV. Azo- and

hydroxy-3,4-benzotropolones  
 AUTHOR(S): Ebine, Seiji  
 CORPORATE SOURCE: Saitama Univ., Urawa  
 SOURCE: Bull. Chem. Soc. Japan (1965), 38(12), 2029-34  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI: For diagram(s), see printed CA Issue.  
 AB: cf. CA 57, 729g. A soln. of benzenediazonium chloride prep'd. from 175 mg. aniline was added to an ice cold mixt. of 250 mg. 3,4-benzotropolone (I) in 25 cc. AcOH and 4.5 g. NaOAc in 13.5 cc. H2O and the mixt. stirred 1 hr. to give 120 mg. 5-phenylazo-3,4-benzotropolone (II), red, m. 148-50.degree. (Me2CO). When the coupling reaction was carried out in pyridine soln., a dark red tarry product was formed. Chromatography on silica gel in benzene soln. gave an unidentified azo compd., m. 171.5-2.5.degree., in 14% yield. Similarly prep'd. from 7-bromo-3,4-benzotropolone (III) in AcOH soln. was 28% 5-phenylazo-7-bromo-3,4-benzotropolone, brownish orange, m. 168-9.degree..

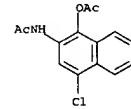
To an ice cold soln. of 500 mg. III in 15 cc. pyridine was added dropwise a soln. of benzenediazonium chloride from 240 mg. aniline. The ppt. formed on diln. with an equal vol. of H2O was filtered off to give 160 mg. 2-phenyl-2H-benz[g]indazole-4,5-dione (IV), yellow, m. 251.degree. (EtOH).

2-(*p*-Tolyl)-2H-benz[g]indazole-4,5-dione (V), orange yellow, m. 273.degree., was similarly prep'd. in 69% yield. The filtrate from IV was concd. in vacuo to a tarry residue which was dissolved in benzene. Chromatography on silica gel gave 45 mg. 2-phenylazonaphthol (VI), m.p. and mixed m.p. with an authentic sample 134.degree.. The filtrate from V gave no azonaphthol. The coupling of 500 mg. III with 1 equiv. diazotized p-anisidine in pyridine soln. gave 65 mg. 2-(*p*-anisylazo)-1-naphthol, dark brown, m. 182.5.degree., and 30 mg. 2,4-bis(*p*-anisylazo)-1-naphthol, m. 124.degree., and 30 mg. 2,4-bis(*p*-anisylazo)-1-naphthol, dark brown, m. 182.5.degree.. Similar coupling of 7-chloro-3,4-benzotropolone with benzenediazonium chloride in pyridine soln. gave a crude product which on chromatography in benzene soln. on silica gel gave 85 mg. VI, m.p. and mixed m.p. 134.degree.. IV and V on hydrogenation over Pd-charcoal gave leuco compds. which regenerated the original materials on removal of solvent and catalyst and exposure to air. A suspension of 100 mg. IV and 500 mg. fused NaOAc in 20 cc. Ac2O was treated with 300 mg. Zn powder. After the mixt. became nearly colorless, excess Ac2O was decompd. with H2O, the ppt. extd. with hot alc., and the ext. concd. to give 100 mg. 2-phenyl-4,5-diacetoxo-2H-benz[g]indazole (VII), m. 191.degree. (EtOH). 2-(*p*-Tolyl)-4,5-diacetoxo-2H-benz[g]indazole (VIII), m. 167-8.degree., was similarly prep'd. in 77% yield. VII and VIII underwent hydrolysis and autooxidn. to regenerate IV and V when 10-mg. samples were heated with 1.5

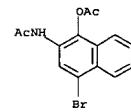
L7 ANSWER 27 OF 29 CAPLUS COPYRIGHT 2002 ACS (Continued)  
 mg. Me 1-hydroxy-4-bromo-2-naphthoate, m. 120-1.degree. (MeOH). Reaction with diazomethane gave Me 1-methoxy-4-bromo-2-naphthoate, m. 94.degree.. Ir data were given.

IT 5813-14-9. Acetamide, N-(4-chloro-1-hydroxy-2-naphthyl)-, acetate 5899-16-1. Acetamide, N-(4-bromo-1-hydroxy-2-naphthyl)-, acetate (prepn. of)

RN 5813-14-9 CAPLUS  
 CN Acetamide, N-(4-chloro-1-hydroxy-2-naphthyl)-, acetate (7CI, 8CI) (CA INDEX NAME)

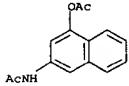


RN 5899-16-1 CAPLUS  
 CN Acetamide, N-(4-bromo-1-hydroxy-2-naphthyl)-, acetate (7CI, 8CI) (CA INDEX NAME)

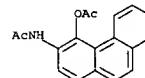


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L7 ANSWER 28 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1965:416667 CAPLUS  
 DOCUMENT NUMBER: 63:16667  
 ORIGINAL REFERENCE NO.: 63:2917e-f  
 TITLE: Reactions of isomeric 1-chloro-2-methylthio-1,2-diphenylethanones with base  
 AUTHOR(S): Oki, Michinori; Kimura, Atsuko  
 CORPORATE SOURCE: Univ. Tokyo  
 SOURCE: Bull. Chem. Soc. Japan (1965), 38(4), 682-3  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB trans-Stilbene oxide and MeSNa in EtOH gave erythro-2-methylthio-1,2-diphenyl-1-ethanol (erythro-I), m. 74.degree., which with SOC12 in CHCl3 gave erythro-1-chloro-2-methylthio-1,2-diphenylethane (erythro-II), m. 123.degree.. threo-I acetate m. 71.5.degree.; Threo-II m. 52.5.degree.. Refluxing erythro-II with N-tert-butyl-N-tert-BuOH for 12 hrs. gave only trans-stilbene. Similar treatment of threo-II gave .alpha.-methylthio-trans-stilbene; sulfone compd. m. 118-19.degree..  
 IT 2765-13-1, Acetamide, N-(4-hydroxy-2-naphthyl)-, acetate (prepn. of)  
 RN 2765-13-1 CAPLUS  
 CN Acetamide, N-[4-(acetyloxy)-2-naphthalenyl]- (9CI) (CA INDEX NAME)



L7 ANSWER 29 OF 29 CAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1963:468981 CAPLUS  
 DOCUMENT NUMBER: 59:68981  
 ORIGINAL REFERENCE NO.: 59:1272b, 12729a-c  
 TITLE: Hydroxy derivatives of phenanthrene. III.  
 1,2-Phenanthrenequinone 2-oxime and 3,4-phenanthrenequinone 3-oxime  
 AUTHOR(S): Bogdanov, S. V.; Shiblyaeva, L. S.  
 SOURCE: Zh. Obshch. Khim. (1963), 33(5), 1529-32  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 GI For diagram(s), see printed CA Issue.  
 AB cf. CA 59, 11483e. 1,2-Phenanthrenequinone refluxed 2 hrs. with HONH2.HCl  
 and pyridine in EtOH gave, after treatment with H2O and NaOH, an insol. unidentified black solid; acidification of the ext. gave 65% orange 1,2-phenanthrenequinone 2-oxime (I), decompd. 167-8.degree.; purified via the K salt; the oxime was deep red, decompd. 176-6.5.degree.; K salt, red plates, sparingly sol. in EtOH or cold H2O; it failed to react with NaHSO3. Redn. of I with SnCl2 in EtOH gave 2-amino-1-phenanthrol, decompd. 317-18.degree.. 3,4-Phenanthrenequinone similarly gave 70% 3-oxime (II), orange, decompd. 164-5.degree.; K salt was sol. in EtOH.  
 II was unaffected by NaHSO3, while SnCl2 reduced it to 3-amino-4-phenanthrol, isolated as HCl salt, difficulty sol. colorless plates, which with Ac2O in pyridine gave the diacetyl deriv., m. 198.5-9.5.degree.. I refluxed 26 hrs. with HONH2.HCl in pyridine and 90% EtOH gave 67% 1,2-phenanthrofuran, m. 171.8-2.5.degree.. II similarly treated 60 hrs. failed to react.  
 IT 98364-45-5, Acetamide, N-(4-hydroxy-3-phenanthryl)-, acetate (prepn. of)  
 RN 98364-45-5 CAPLUS  
 CN Acetamide, N-(4-hydroxy-3-phenanthryl)-, acetate (7CI) (CA INDEX NAME)



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